Hyper Attention and the Rise of the Antinarrative: Reconsidering the Future of Narrativity

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An unchallenged certainty often expressed in narratology discourse is that narrative, as a defining aspect of humanity, will remain fundamentally untouched by the emergence of new technologies. This essay challenges that assumption by considering the consequences for narrativity of the increasingly prevalent phenomenon of hyper attention, which appears to be related to online computer use. Specifically, this paper suggests that the emergent cognitive style of hyper attention is linked to both a declining ability and willingness to engage with traditional narrative structures and the rise of the antinarrative, a nonform that eschews such conventions as plot, character development, and resolution.

In "The End of Narrative" (2006), Peter LaSalle offers a quasi-fictional portrait of a world in which "narrative had really ended, imploded and then some" (p. 676). Amidst the sheer glut of online storytelling, the millions and millions of blogs, "narrative had ended, and there was no story, no valid revelation in the world, only too much to be read for any of it to have any consequence, only absolute meaninglessness" (p. 674). In the world of LaSalle's "story," the characters are caught in a futile struggle "against the larger and prevailing antinarrative force" (p. 673).

LaSalle's anti-tale offers a bleak response to the truism that narrative, as a defining, integral aspect of humanity, will remain fundamentally untouched by new media. As Roland Barthes (1982) proclaims, "narrative is present in every age, in every place, in every society; it begins with the very history of mankind and there nowhere is nor has been a people without narrative" (p. 251). This unimpeachable truth is taken up by contemporary scholars of narrative, who assert that information and communications technologies will not fundamentally alter narrative or diminish its enduring place in our lives and minds. For

example, Marie-Laure Ryan (2004) argues that narrative "survived the transition from orality to writing, from manuscript to print, from book to multimedia, and from the stage to moving pictures," and should therefore "easily weather the digital revolution" (p. 356). Ana Menendez (2009) concurs: "Technological inventions arise and fall away. In the beginning was story and through every innovation story has persisted, and so it will be. The end of story will be the end of us" (p. 24). Similarly, in *Hamlet on the Holodeck*, Janet Murray (1997) argues that digital media are emerging as the stage on which old narratives can be replayed in new ways, as the title of her book suggests; "narrative beauty," she concludes, "is untouched by medium" (p. 273).

Like LaSalle, my purpose here is to offer a kind of thought experiment that challenges the certainties underlying such claims as we look to the future of narrative. However, unlike LaSalle and the scholars of narrative I have quoted, I choose to shift my gaze away from the media with which stories are told and toward the people who tell and read those stories. For if there is, as LaSalle puts it, an "antinarrative force" at large in the world today, I believe that it is not computers, and not the plethora of information they make available, but the minds of those who have grown accustomed to simultaneously navigating multiple streams and multitudinous fragments of disconnected information. In particular, I am interested in the impact upon narrativity of the emergence of a habit of mind that Katherine Hayles (2007) has labeled "hyper attention." This paper is a probe into the possibility that this cognitive shift will increasingly give rise to non-narrative productions, or antinarratives, whose emergence may indeed presage "the end of narrative."

Hyper Attention

In an essay written in 2007, Hayles posited that "we are in the midst of a generational shift in cognitive styles" (p. 187), from what she calls *deep* attention to *hyper* attention. While deep attention entails an ability to concentrate for long periods of time and a preference for a single stream of information—the kind of attention that, for example, enables people to sit for long, uninterrupted periods, engrossed in a story or novel—hyper attention "is characterized by switching focus rapidly among different tasks, preferring multiple information streams, seeking a high level of stimulation, and having a low tolerance for boredom" (p. 187).

At about the same time, Linda Stone (2009) identified a similar cognitive phenomenon, which she labeled "continuous partial attention." Continuous partial attention entails the diffusion of attention from a central online task, such as researching or writing a paper, to diversionary information gathering or communications activities, such as emailing and Web surfing. This behaviour has also been called "media multitasking," but the term is a misnomer that fails to capture the essence of the behavioural and cognitive shift involved. As Stone emphasizes, "Continuous partial attention and multi-tasking are two different attention strategies, motivated by different impulses" (n.p.). Multitasking, as we all know, entails doing more than one thing at a time, and it is primarily motivated by a desire to increase productivity. Continuous partial attention is a qualitatively different phenomenon from multitasking because it is motivated not by productivity but by an insatiable desire for connectedness:

> To pay continuous partial attention is to pay partial attention— CONTINUOUSLY. It is motivated by a desire to be a LIVE node on the network. Another way of saying this is that we want to connect and be connected. We want to effectively scan for opportunity and optimize for the best opportunities, activities, and contacts, in any given moment. To be busy, to be connected, is to be alive, to be recognized, and to matter. (Stone, n.d., n.p.)

Whether we call it hyper attention or continuous partial attention, this fragmented, perpetually stimulated form of awareness is undoubtedly becoming more prevalent. Indeed, according to a Kaiser report (Foehr, 2006), media multitasking has "become a way of life" (p. 1) for teenagers and young adults. Other studies repeatedly confirm this conclusion (see, for example, Lenhart, Hitlin, & Madden, 2005; Carrier, Cheever, Rosen, Benitez, & Chang, 2009). Based on his more informal observations, Prensky (2001) asserts that young people who have grown up in "the twitch-speed, multitasking, random-access, graphics-first, active, connected, fun, fantasy, quick-payoff world" (p. 5) of computers crave interaction. As a result, they are less able to attend to a single information stream, and less prone to spend time reflecting.

Certainly, it is increasingly common to hear educators at all levels discussing, and sometimes lamenting, changes in students' cognitive abilities—changes that appear to be linked to the increasing prevalence of new communications technologies in their lives. In fact, the phenomenon

first began to intrigue me several years ago when an undergraduate student submitted a paper describing his struggles to achieve focus when confronted with an essay assignment. The following excerpt dramatically illustrates the realities of continuous partial attention in this young man's life:

> Okay, first thing's first. I must open a blank Microsoft Word document. Hmmm…well first I'll just open up an Internet Explorer window and check my email and Facebook. No new messages. I'll just check up on the Blue Jays' off-season activity too ... Well, I guess there are no new Google News items on the subject since I last checked two hours ago. While I'm at it though, I might as well open two more tabs and see how the Toronto Raptors and the Boston Bruins did in their games last night ... I should check the New York Times science section quickly as well. I know I'm procrastinating a bit with the assignment but this is still educational, so it's not all bad ... Back to the paper though. I need to get some general idea of what I'm going to say first, and then make a rough outline. Man, I love this song. I wonder if Modest Mouse is going on tour any time soon. Modestmousemusic.com will have the answers. I'll just check out a few other band sites too .... I should learn how to play this song though. It sounds pretty easy. I'll just Google the chords and copy and paste the lyrics into my blank Word document and make a print. I'll grab my guitar…sweet, this song isn't hard at all. Whoa, okay Jeff, you seriously have to stop... You've been sitting at your computer for over an hour now and you've got nothing.

In the past decade or so, anecdotal observations about the epidemic of inattention among young people have been increasingly supported by research that suggests that repeated technology use is actually linked to changing brain structures, as the adaptable human brain creates new synapses that allow it to deal with the ever faster flow of information and communication in the face-to-face and virtual worlds (on this, see for example Carr, 2010; Restak, 2004; Waterston, 2011). Of particular interest is the inside view of brain change made possible by new magnetic resonance imaging (MRI) technologies. For example, using MRIs, Yuan et al. (2011) and Zhou et al. (2011) are able to show that long-term, heavy Internet use leads to alterations in particular regions of the brains of adolescents. Research further shows that significant changes

in grey matter can occur even after only a week (Driemeyer et al., 2008), and that this kind of brain change in response to technology use continues even into old age (Small, Moody, Siddarth, & Bookheimer, 2009). While it is still very new, such research suggests that there is a neuroscientific basis for the changing habits of mind described by Hayles, Stone, Prensky, and others.

Hyper Attention and Narrativity

Hyper attention, then, entails a kind of neurological addiction to the constant stimulation of tweets, text messages, and social networking sites, with potentially drastic structural effects on the individual's ability to attend, learn, and process information. How does this emergent cognitive style affect the individual's ability and willingness to engage with narrative?

Before answering this question, I want to pause for a moment to clarify what I mean by narrative. This is necessary because, as Barton Tharber (2004) observes, the nature of narrative is "a vexed subject" (p. 2157), eluding a single, widely accepted definition. Thus, while Jerome Bruner (1990) suggests that the principal property of narrative is "its inherent sequentiality" (p. 43), others, from Aristotle to Walter Benjamin, "insist on closure as an essential component—perhaps *the* essential component—in narrative poetics" (Douglas, 1994, p. 160). Sequentiality and closure are evident even in the brevity of postcard stories and Twitter stories, micro-fictional forms whose increasing popularity may be taken as yet another sign of decline in the attentional resources of today's readers. Therefore, in this paper, I am referring to narrative in the sense evoked by Tuman (1999/2000), who describes "the difficult, circuitous but emotionally rewarding journey that provides the basis for traditional narrative" (p. 209). The essential quality of narrative as I define it here is what Tuman calls, "narrative delay, having to wait for what one wants" (p. 218)—in other words, the discipline to defer gratification, which narrative teaches.

One of the widely observed consequences of a habitual engagement with multiple information streams is a decrease in tolerance for this kind of disciplined engagement with and immersion in another world, and for the traditional narrative structures and devices, such as plot and character development, that are typically used to defer gratification. Thus, in *The Shallows: What the Internet is Doing to Our Brains*, Nicholas Carr (2010) laments that his capability to follow narrative

threads has become severely diminished as a result of all the time he spends online, trolling the Internet:

> I'm not thinking the way I used to think. I feel it most strongly when I'm reading. I used to find it easy to immerse myself in a book or a lengthy article. My mind would get caught up in the twists of the narrative …. That's rarely the case anymore. Now my concentration starts to drift after a page or two. I get fidgety, lose the thread, begin looking for something else to do. (p. 6).

Along the same lines, Almog (2002) hypothesizes that the nature of the Web, in particular the constant exposure to "the immense hypertext," "the global electronic data flow" (pp. 24-25), profoundly affects our "narrative cognizance," our intellectual "ability to become storytellers and story listeners" (p. 3). Abbott (2005) summarizes the perceived trend, observing that we are "becoming, culturally, even globally, more participatory, less keenly focused on the end of the story, more prone to want to cruise around and even do things in the multiple inner spaces of narrative" (p. 531).

However, despite the growing prevalence of such observations and speculations, the consequences of hyper attention for narrative construction and engagement have received little attention from researchers. Studies on the neurology of narrative make clear the relationship between brain functioning and the narrative constructions, or lack thereof, in amnesiacs , autistic and ADHD children, and brain injured individuals. However, research has not yet begun to examine how the constant navigation of multiple information streams, and the state of hyper attention to which it gives rise, impacts the narrative abilities of people with otherwise unimpaired brain functioning.

I suggest that one reason for this is that most narratology—and even the emergent field of "unnatural narratology" (Alber, Iverson, Nielsen, & Richardson, 2010)—is focused squarely upon the properties of narrative, and the ways in which those properties are or are not perpetuated within new media forms. Thus, over the past four or five decades, emergent media such as MOOs and MUDs, hypertext, and videogames have each given rise, as I suggested earlier, to apparently unquestioning reaffirmations of the ability of narrative to persist within emergent technological forms.

Bruner (1990) reminds us that there is, however, another way of thinking about narrative: not as a form with an independent existence

outside of the minds of those who construct and construe it, but as a cognitive propensity, which includes both "a readiness or predisposition to organize experience into a narrative form" (p. 45) and an ability to follow the narrative constructions of others. When narrative is viewed in this way, as an intellectual ability possessed by the human creators and receivers of stories, it becomes not only possible but necessary to inquire into the extent to which new technologies and multiple information streams are implicated in a retooling of our cognitive apparatus that alters the very terms of our engagement with narrative—and which thus impinges upon the nature of narrative itself.

The Rise of the Antinarrative

To this point, I have suggested that traditional narrative forms demand certain cognitive propensities—attention, focus, discipline, and the willingness to defer gratification—that individuals who spend much of their time traveling the information slipstream tend increasingly not to possess.

However, these kinds of intellectual demands are not exerted by the antinarrative. If the narrative is a form that uses devices such as plot, character development, and closure in order to sustain readers' engagement, then we can say that the antinarrative is characterized by a lack of sequentiality, coherent characterization, and closure, and does not require that readers defer gratification. For the antinarrative is the shape that story takes in a world in which information holds sway, and in which individuals leap from one information fragment to another, driven not by a desire to follow a winding narrative thread—"to get caught up in the twists," as Carr described—but to be at all times connected to as many nodes in the network as possible.

Of course, the antinarrative is not new; its history goes back to the early and mid-twentieth century, when it arose as an avant-garde and, later, postmodern response to a chaotic modern world that no longer seemed to be well represented by sequential realism. Writers such as Gertrude Stein, Vladamir Nabokov, Jorge Luis Borges, Virginia Wolf, John Barth, and James Joyce experimented with techniques that "deliberately imped[ed] the constitution of storyworlds"—for example, by "radically deconstruct[ing] the anthropomorphic narrator, the traditional human character, or real-world notions of time and space" (Alber, 2009, p. 80)—in order to better depict the incoherence of contemporary human experience and oppose the authority of realism.

Playwrights such as Samuel Beckett and Bertolt Brecht strove to achieve similar effects in theatre productions.

More contemporary books and films continue to experiment with different ways of overturning narrative conventions and authority; but the antinarrative now finds its preeminent expression within the domain of the online computer. It was the online computer, for example, that first gave us hypertextual narratives, digital networks of nodes and links that have no beginning or end but are assembled and reassembled by individuals as they follow hyperlinks. Arising in the 1990s, these "stories"—perhaps better characterized as "happenings"—are typically viewed as an attempt to capitalize upon the interactive capabilities of the new medium. What I am suggesting, however, is that the growing popularity of such structures is due in large part to the fact that they are so well suited to the altered cognitive propensities of hyper-attentive, distractible web surfers, whose reading practices tend to be sporadic and fragmentary. In fact, one author of hypernarratives admits that her fictional constructions are a concession to the new intolerance for textual depth and density: "On the web," she says, "I can not expect the reader to read more than three or four screens before moving restlessly on to another url ... I am also aware of the work's existence in the wider whole of the web and of the 'browsing' way of reading that is prevalent in this medium" (Malloy, 2007, n.p.).

More recently, we have seen the emergence of transmedia stories, which take place on multiple media platforms—for example, a movie, a website, and a video game. Insofar as they compel readers to move restlessly from one web page to another, and one medium to another, we can say that hypertextual and transmedia forms both demand and reinforce hyper attention as a mode of engaging with narrative.

But hypertextual and transmedia narratives are merely intermediary steps on the way to the all-pervasive antinarrative experience into which we are plunged whenever we spend time online. For the web in its entirety offers an experience of information that has no beginning, middle, or end, and that is always unfinished and unfinishable, as social networking sites and video games, tweets and web pages ceaselessly flow into each other to create a ubiquitous information surround through which we journey, blithely leaping from one disconnected information nugget to another. As we increasingly immerse ourselves within this vast technological antinarrative, and as more and more human interactions and experiences are situated within it, story as conventionally understood may become increasingly incomprehensible to

the hyper-attentive mind, and therefore increasingly diminished as a source of wisdom and truth in our lives. As in LaSalle's "The End of Narrative" (2006), a coherent narrative line may give way to an incessant series of Google searches that lead, as LaSalle puts it, to "the ultimate frightening destination … 'Which *was* nowhere,' he said" (p. 674).

The Future of Narrativity

Those who complacently assert the survival of narrative also tend to believe that new media simply enlarge the palette of narrative possibilities. They insist, for instance, that the seemingly random path followed by Internet users as they surf the Web constitutes a new kind of narrative construction. Thus, Tharber (2004) contends that "we are authors in a newer sense when we surf the web, following hypertext links, reading/writing/creating our own journey, our own narrative, through the single document the world itself is writing" (p. 2156).

Once again, I believe that this kind of complacency about the persistence of narrative is unwarranted. In this probe, I have suggested that we consider the possibility that this is not the case—that as our habits of mind and cognitive abilities are shaped by repeated exposure to the hyperstimulation of the online computer, the narrative domain actually contracts, with both readers and writers becoming less willing and able to create and attend to narrative sequences. While new forms of expression are indeed emerging, time-honoured narrative structures may in fact become less available to us.

This, of course, has profound implications for the future of narrativity. It also has profound implications for the future of humanity. Without the kind of deferred gratification that we learn as we create and follow the mazy paths of a story, we will become a different kind of being—to echo Barthes, "a people without narrative"—and our relationships to each other will likely be governed by different kinds of social structures.

My purpose here, however, is not to prophesize, but to probe—to offer one vision of the future that belies our uncritical claims regarding narrative's survival as an innate human predisposition. I suggest that, as we inquire into the future of narrativity, we should not ask how narrative, as a human absolute, will manifest itself within new media; rather, we should ask how it will be shaped by the new mind, the hyper attentive mind whose reading practices are fragmentary, extremely distractible, and increasingly disinclined to follow a single narrative thread to its distant

conclusion. And having done so, we should then confront the even more pressing questions which naturally arise: What kind of a world do we want to live in, and what kind a people do we want to be?

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